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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,326	02/08/2001	Karin Loffler	D078 1110	7007

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James F Vaughan
P O Box 725388
Atlanta, GA 31139-9388

EXAMINER
COLE, ELIZABETH M

ART UNIT 1771	PAPER NUMBER
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DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/719,326		Applicant(s) LOFFLER, KARIN	
	Examiner Elizabeth M. Cole		Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on ____.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 2-16, 18-23, 25, 26, 29 and 31 is/are pending in the application.

 4a) Of the above claim(s) ____ is/are withdrawn from consideration.

5) ☐ Claim(s) ____ is/are allowed.

6) ☒ Claim(s) 2-16, 18-23, 25-26, 29 and 31 is/are rejected.

7) ☐ Claim(s) ____ is/are objected to.

8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

 a) ☐ All b) ☐ Some * c) ☐ None of:

 1. ☐ Certified copies of the priority documents have been received.

 2. ☐ Certified copies of the priority documents have been received in Application No. ____.

 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: ____
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1. Claims 26, 29, 31, 2-16, 18-23, 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not provide support for the limitation that the coating compounds forms a closed layer around the at least one reinforcement material.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-16, 18-23, 25-26, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 07-011755, (machine translation attached) in view of Edinger et al, U.S. Patent No. 5,923,237. JP '755 discloses a multilayer flexible floor tile which is useful as a substitute for carpet comprising a first layer 11 and a second layer having a nonwoven fabric reinforcement embedded in a synthetic resin such as PVC. See figure 5 and paragraph 0013 of the machine translation. With regard to the claimed basis weight, since the fabric functions as a decorative and reinforcing component in the tile of JP '755 it would have been obvious to one of ordinary skill in the art to have selected the basis weight through the process of routine experimentation which resulted in the optimal strength for the tile. While JP '755 does disclose that the PVC can be foamed, JP '755 does not explicitly state that the PVC is foamed by a foaming agent. Edinger teaches in the background of the invention section at col. 1, lines 30-33. Therefore, it would have been obvious to have employed a foaming agent in the PVC of JP '755,

since JP '755 teaches that the resin may be foamed and Edinger teaches that foaming agents were known to be useful to foam PVC resins in flooring tiles. With regard to claim 2, presumably the nonwoven material employed is a dry nonwoven material since it does not comprise additional additives or wetting agents. With regard to claim 3, the nonwoven may comprise rayon fibers, (which are made from regenerated cellulose). With regard to claim 4, the nonwoven can be patterned either in a regular or random pattern. See paragraph 0013. With regard to claim 5, the thickness of the layers is about 1-5 mm. See paragraph 0009. With regard to claims 6-7, the resin material can be PVC. With regard to claim 29, the resin can be transparent. See paragraph 0013. With regard to claim 19, JP '755 does not disclose the use of additional fillers. With regard to claim 22, JP '755 includes an additional carrier layer 11. See drawings. With regard to claim 26, JP '755 teaches forming the reinforced layer and combining the reinforced layer with a carrier layer such as layer 11. With regard to claim 30, PVC is a plastisol.

4. With regard to claims 8-16, 20-21, 23, 26, 31, JP '755 does not disclose the use of the claimed resins. Edinger describes floor coverings where in the cover layers can be made from a combination of epoxidation products of sub esters of polycarboxylic acids with polyethylene glycols. See col. 5, lines 15-43. Edinger teaches that the resin components can be used in making floor tiles and are an improvement over PVC because PVC produces negative ecological effects. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the resin composition of Edinger instead of the PVC of JP '755, motivated by the expectation that this would produce a floor tile which would not have a negative impact on the environment. With regard to the recitation of additional layers, Edinger teaches that flooring tiles can comprise multiple reinforcing layers. Therefore, it would have

been obvious to have added additional layers to the material of JP ‘755 in order to further reinforce the tile material of JP ‘755.

5. Applicant's arguments filed 3/31/06 have been fully considered but they are not persuasive. Applicant argues that the nonwoven fabric in Tajima is not a reinforcing component. However, the presence of the fabric layer in the resin layer would necessarily reinforce the layer. Nothing has to be done or changed or modified in the Tajima reference for the layer to be a reinforcement. The presence of the layer automatically reinforces the layer. Additionally, any person of ordinary skill in the art would recognize that fiber reinforced composites or FRPs are notoriously well known in the art and that any fabric which is embedded in a resin material is a reinforcement for the resin material. Therefore, the rejection is maintained.

6. Applicant argues that the fabric in Tajima is not completely embedded in the resin layer because figure 5 shows that the layer is the same thickness as the resin layer. However, figure 5 shows that the surface of the resin layer 33 is above the nonwoven layer 31. Applicant also argues that Tajima discloses impregnating the fabric with the resin and therefore, that the fabric cannot be embedded in the resin. However, the instant specification also uses the word impregnate. The word impregnate does not preclude the resin being present on the top surface but instead only refers to how the resin and nonwoven are combined and indicates that the nonwoven is saturated and filled with the resin. Figure 5 clearly shows that the fabric is within or embedded in the resin. Therefore, the layer of Tajima is embedded in the resin layer and the rejection is maintained.

7. Applicant argues that there must a motivation to combine the two references. As set forth above, the motivation to combine the references is found in the fact that both Tajima and Edinger

relate to flooring materials and Edinger teaches particular resins for use in making floor tiles which have advantageous properties.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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The fax number for all official faxes is (571) 273-8300.

A handwritten signature in black ink, appearing to read "Elizabeth M. Cole".

Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c